

## CLAIMS

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1. A rechargeable battery comprising:

an electrode plate group (10) including a positive  
5 electrode plate (1), in which a positive electrode material  
(1a) is attached to a current collector (1b), a negative  
electrode plate (2), in which a negative electrode material  
(2a) is attached to a current collector (2b), the positive  
and negative electrode plates being superimposed with an  
10 intervening separator (3) therebetween, wherein the current  
collector of one or other of the positive electrode plate and  
the negative electrode plate is projected on at least one  
side of the electrode plate group (10) for forming by itself  
a flat plane (11, 12) on one side of the electrode plate  
15 group;

an electrolyte;

a battery container (4) in which the electrode plate  
group and the electrolyte are accommodated; and

a current collecting plate (8, 9) joined to the flat  
20 plane (11, 12) formed at one side of the electrode plate  
group.

2. The rechargeable battery according to claim 1,  
wherein the positive electrode plate (1) and the negative  
25 electrode plate (2) are wound in spiral fashion with the

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 separator (3) interposed therebetween, with their current collectors (1b, 2b) being respectively projected at opposite ends of the electrode plate group (10) thereby forming respective projected portions, and flat planes (11, 12) are formed at opposite ends of the electrode plate group by pressing said projected portions of the current correctors at opposite ends of the electrode plate group in directions along the winding axis of the electrode plate group.

10           3.    The rechargeable battery according to claim 2, wherein the current collecting plate (8, 9) is arranged in contact with each of the flat planes (11, 12), and is laser-welded in the radial direction at a plurality of locations in the circumferential direction.

15           4.    The rechargeable battery according to claim 2 or 3, wherein the current collecting plate (8, 9) is formed with a plurality of ribs (16) thereon such as to protrude towards the projected portions of the current collectors (1b, 2b),  
 20   the flat planes (11, 12) being formed by pressing said ribs (16) against the projected portions of the current collectors (1b, 2b), and the current collecting plate (8, 9) is welded to each of the current collectors (1b, 2b) at said ribs (16).

Handwritten notes at the bottom of the page: "1b" and "1b" with arrows pointing to the current collectors in the text above.